Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	7	user with (history or activit\$4 or behavior\$4) same (web adj server\$1)same (identifiers or ids) same database and 709/2\$\$.ccls.	USPAT	OR	ON	2007/04/14 14:51
L2	9	user with (identifiers or ids) same (history or activit\$4 or behavior\$4) same (web adj server\$1)same database and 709/2\$\$.ccls.	USPAT	OR	ON	2007/04/14 14:52
L3	0	user with ((multi\$4 or plurality) adj(identifier\$1 or id\$1)) same (history or activit\$4 or behavior\$4) same (web adj server\$1)same database and 709/2\$\$.ccls.	USPAT	OR	ON	2007/04/14 14:53
L4	0	user with ((multi\$4 or plurality) adj(identifier\$1 or id\$1)) and (history or activit\$4 or behavior\$4) same (web adj server\$1)same database and 709/2\$\$.ccls.	USPAT	OR	ON	2007/04/14 14:53
L5	141	user with ((multi\$4 or plurality) adj(identifier\$1 or id\$1))	USPAT	OR	ON	2007/04/14 14:53
L6	7	user adj ((multi\$4 or plurality) adj(identifier\$1 or id\$1))	USPAT	OR	ON	2007/04/14 14:53
L7	53	user adj3 ((multi\$4 or plurality) adj(identifier\$1 or id\$1))	USPAT	OR	ON	2007/04/14 14:54
L8	1	user adj3 ((multi\$4 or plurality) adj(identifier\$1 or id\$1)) and (history or activit\$4 or behavior\$4) same (web adj server\$1)same database	USPAT	OR	ON	2007/04/14 14:54
L9	21	user adj3 ((multi\$4 or plurality) adj(identifier\$1 or id\$1)) and (history or activit\$4 or behavior\$4) and (web adj server\$1)same database	USPAT	OR	ON	2007/04/14 14:58
L10	27	user adj3 ((multi\$4 or plurality) adj(identifier\$1 or id\$1)) and (history or activit\$4 or behavior\$4) and (web adj server\$1)	USPAT	OR	ON	2007/04/14 14:58
L11	27	(user adj3 ((multi\$4 or plurality) adj(identifier\$1 or id\$1))) and (history or activit\$4 or behavior\$4) and (web adj server\$1)	USPAT	OR	ON	2007/04/14 14:58
L12	43	(user adj3 ((multi\$4 or plurality) adj(identifier\$1 or id\$1))) and (history or activit\$4 or behavior\$4) and (web adj server\$1)	US-PGPUB; USPAT	OR	ON	2007/04/14 15:00

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L13	0	(user adj3 ((multi\$4 or plurality) adj(identifier\$1 or id\$1))) same (history or activit\$4 or behavior\$4) and (web adj server\$1)	US-PGPUB; USPAT	OR	ON	2007/04/14 14:59
L14	2	(user adj3 ((multi\$4 or plurality) adj(identifier\$1 or id\$1))) and (history or activit\$4 or behavior\$4) same (web adj server\$1)	US-PGPUB; USPAT	OR	ON	2007/04/14 14:59
S52 9	3	(user adj distribute\$4 adj server)	USPAT	OR	ON	2005/08/02 12:57
S53 0	2597	((user adj distribute\$4 adj server) or uds)	USPAT	OR	ON	2005/08/02 12:58
S53 1	2597	((user adj distribute\$4 adj server) or UDS)	USPAT	OR	ON	2005/08/02 12:58
S53 2	38	((user adj distribute\$4 adj server) or UDS) same database	USPAT	OR	ON	2005/08/02 12:58
S53 3	6	((user adj distribute\$4 adj server) or UDS) same database same server\$1	USPAT	OR	ON	2005/08/02 12:59
S53 4	0	((user adj distribute\$4 adj server) or UDS) same database same server\$1 and (service adj request\$4 adj node)	USPAT	OR	ON	2005/08/02 12:59
S53 5	3	((user adj distribute\$4 adj server) or UDS) same database same server\$1 and identifier	USPAT	OR	ON	2005/08/02 13:04
S53 6	0	((user adj distribute\$4 adj server) or UDS) same (primary adj database) same server\$1 and identifier	USPAT	OR	ON	2005/08/02 13:05
S53 7	3	((user adj distribute\$4 adj server) or UDS) same database\$1 same server\$1 and identifier	USPAT	OR .	ON	2005/08/02 13:24
S53 8	1	((user adj distribute\$4 adj server) or UDS) same database\$1 same server\$1 and identifier and 709/2\$\$.ccls.	USPAT	OR	ON	2005/08/02 13:09
S53 9	6	((user adj distribute\$4 adj server) or UDS) same database\$1 same server\$1 and identify\$4	USPAT	OR	ON	2005/08/02 13:25
S54 0	3	((user adj distribute\$4 adj server) or UDS) same database\$1 same server\$1 and identify\$4 and LDAP	UŚPAT	OR	ON	2005/08/02 13:25
S54 1	2	((user adj distribute\$4 adj server) or UDS) same database\$1 same server\$1 and identify\$4 and LDAP and radius	USPAT	OR	ON	2005/08/02 13:29

S54 2	2	((user adj distribute\$4 adj server) or UDS) same database\$1 same server\$1 and identify\$4 and LDAP and radius and ((domain adj name adj server) or DNS)	USPAT	OR	ÓΝ	2005/08/02 17:16
S54 3	0	((user adj distribute\$4 adj server) or UDS) same database\$1 same server\$1 and identify\$4 and LDAP and radius and ((domain adj name adj server) or DNS) and ((subscription adj locator adj function) or SLF)	USPAT	OR	ON	2005/08/02 13:54
S54 4	7	((user adj distribute\$4 adj server) or UDS) and ((subscription adj locator adj function) or SLF)	USPAT	OR	ON	2005/08/02 13:54
S54 5	0	((user adj distribute\$4 adj server) or UDS) and ((subscription adj locator adj function) or SLF) same database\$1 same server\$1 and identify\$4 and LDAP and radius	USPAT	OR	ON	2005/08/02 13:55
S54 6	0	((user adj distribute\$4 adj server) or UDS) and ((subscription adj locator adj function) or SLF) same database\$1 same server\$1 and identify\$4 and LDAP	USPAT	OR	ON	2005/08/02 13:55
S54 7	0	((user adj distribute\$4 adj server) or UDS) and ((subscription adj locator adj function) or SLF) same database\$1 same server\$1	USPAT	OR	ON	2005/08/02 13:55
S54 8	0	((user adj distribute\$4 adj server) or UDS) and ((subscription adj locator adj function) or SLF) same database\$1	USPAT	OR	ON	2005/08/02 13:55
S54 9	7	((user adj distribute\$4 adj server) or UDS) and ((subscription adj locator adj function) or SLF) anddatabase\$1	USPAT	OR	ON	2005/08/02 14:11
S55 0	0	((user adj distribute\$4 adj server) or UDS) and ((subscription adj locator adj function) or SLF) and database\$1	USPAT	OR	ON	2005/08/02 13:55
S55 1	0	((user adj distribute\$4 adj server) or UDS) and ((subscription adj locator adj function) or SLF) and LDAP	USPAT	OR	ON	2005/08/02 13:55
S55 2	7	((user adj distribute\$4 adj server) or UDS) and ((subscription adj locator adj function) or SLF)	USPAT	OR	ON	2005/08/02 13:56

S55 3	0	((user adj distribute\$4 adj server) or UDS) and ((subscription adj locator adj function) or SLF) and database\$1	USPAT	OR	ON	2005/08/02 14:08
S55 4	0	((user adj distribute\$4 adj server) or UDS) and ((subscription adj locator adj function) or SLF) and ((home adj subscription and server) or hss)	USPAT	OR	ON	2005/08/02 14:09
S55 5	0	((user adj distribute\$4 adj server) or UDS) and ((home adj subscription and server) or hss)	USPAT	OR ,	ON	2005/08/02 14:09
S55 6	0	((user adj distribute\$4 adj server) or UDS) and (home adj subscription and server)	USPAT	OR	ON	2005/08/02 14:10
S55 7	0	((user adj distribute\$4 adj server) or UDS) and (HSS)	USPAT	OR	ON	2005/08/02 14:10
S55 8	0	((user adj distribute\$4 adj server) or UDS) and (Home adj subcription adj server)	USPAT	OR	ON	2005/08/02 14:10
S55 9	0	((user adj distribute\$4 adj server) or UDS) and ((subscription adj locator adj function) or SLF) and database\$1	USPAT	OR	ON	2005/08/02 14:11
S56 0	7	((user adj distribute\$4 adj server) or UDS) and ((subscription adj locator adj function) or SLF)	USPAT	OR	ON	2005/08/02 14:11
S56 1	0	((home adj subcription adj server) or HSS) and ((subscription adj locator adj function) or SLF)	USPAT	OR	ON	2005/08/02 14:12
S56 · 2	566	((home adj subcription adj server) or HSS)	USPAT	OR	ON	2005/08/02 14:12
S56 3	. 0	((home adj subcription adj server) or HSS) and (UDS)	USPAT	OR	ON	2005/08/02 14:12
S56 4	48	((home adj subcription adj server) or HSS) and database	USPAT	OR	ON	2005/08/02 14:13
S56 5	26	((home adj subcription adj server) or HSS) and database and servers	USPAT	OR	ON	2005/08/02 14:13
S56 6	12	((home adj subcription adj server) or HSS) same database and servers	USPAT	OR	ON	2005/08/02 14:16
S56 7	0	((home adj subcription adj server) or HSS) same database and (SLF)	USPAT	OR	ON	2005/08/02 14:16
S56 8	0	((home adj subcription adj server) or HSS) same database and (UDS)	USPAT	OR	ON	2005/08/02 14:16
S56 9	6	((home adj subcription adj server) or HSS) same database and ((MSC) or mobile adj switch\$4 adj center)	USPAT	OR	ON	2005/08/02 14:17

S57 0	0	((home adj subcription adj server) or HSS) same database and ((MSC) or mobile adj switch\$4 adj center) and (gateway adj server)	USPAT	OR .	ON	2005/08/02 14:18
S57 1	5	((home adj subcription adj server) or HSS) same database and ((MSC) or mobile adj switch\$4 adj center) and gateway	USPAT .	OR	ON	2005/08/02 14:18
S57 2	1	((home adj subcription adj server) or HSS) same database and ((MSC) or mobile adj switch\$4 adj center) and gateway and ((domain adj name and server) or DNS)	USPAT	OR	ON	2005/08/02 14:18
S57 3	1	((home adj subcription adj server) or HSS) same database and ((MSC) or mobile adj switch\$4 adj center) and gateway and ((domain adj name and server) or DNS) and LDAP	USPAT	OR	ON	2005/08/02 14:18
S57 4	90	(proxy or portal) same servers same (user adj profile)	USPAT	OR	ON	2005/08/02 17:16
S57 5	10	(proxy or portal) same servers same (user adj profile) same query	USPAT	OR	ON	2005/08/02 17:16
S57 6	3	((user adj distribute\$4 adj server) or UDS) same database\$1 same server\$1 and identify\$4 and LDAP	USPAT	OR	ON	2006/02/20 17:49
S57 7	0	((user adj distribute\$4 adj server) or UDS) same database\$1 same server\$1 and (plurality adj identify\$4) and LDAP	USPAT	OR	ON	2006/02/20 17:50
S57 8	0	((user adj distribute\$4 adj server) or UDS) same database\$1 same server\$1 and (plural\$3 adj identify\$4) and LDAP	USPAT	OR	ON	2006/02/20 17:50
S57 9	0	((user adj distribute\$4 adj server) or UDS) same database\$1 same server\$1 and (multi\$3 adj identify\$4) and LDAP	USPAT	OR	ON	2006/02/20 17:50
S58 0	2	((user adj distribute\$4 adj server) or UDS) same database\$1 same server\$1 and identifiers and LDAP	USPAT	OR	ON	2006/02/20 17:50
S58 1	2	((user adj distribute\$4 adj server) or UDS) same database\$1 same server\$1 and identifier\$1 and LDAP	USPAT	OR	ON	2006/02/20 17:51
S58 2	2	((user adj distribute\$4 adj server) or UDS) same database\$1 same server\$1 and identifiers and LDAP	USPAT	OR	ON	2006/02/20 17:52

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S58 3	1	database\$1 same server\$1 and ((mulit\$3 or plurality) adj identifier\$1) and LDAP	USPAT	OR	ON	2006/02/20 17:52
S58 4	1347	(history or log\$4) same (web adj server\$1) same user\$1	USPAT	OR	ON	2006/06/07 17:00
S58 5	399	(history or log\$4) with (web adj server\$1) with user\$1	USPAT	OR	ON	2006/06/07 17:00
S58 6	194	(history or log\$4) with (web adj server\$1) with user\$1 and 709/2\$\$. ccls.	USPAT	OR	ON	2006/06/07 17:00
S58 7	39	(history or log\$4) with (web adj server\$1) with user\$1 same (identifier or id )and 709/2\$\$.ccls.	USPAT	OR	ON	2006/06/07 17:01
S58 8	39	(history or log\$4) with (web adj server\$1) with user\$1 same (identifier\$1 or id\$1)and 709/2\$\$. ccls.	USPAT	OR	ON	2006/06/07 17:01
S58 9	1082	(history or log\$4) with (web adj server\$1) nearuser\$1 same (identifier\$1 or id\$1)and 709/2\$\$. ccls.	USPAT	OR	ON	2006/06/07 17:01
S59 0	11	(history or log\$4) near3 (web adj server\$1) near3 user\$1 same (identifier\$1 or id\$1)and 709/2\$\$. ccls.	USPAT	OR	ON	2006/06/07 17:02
S59 1	8	(history or log\$4) near3 (web adj server\$1) near3 user\$1 same (identifier\$1 or id\$1)same database and 709/2\$\$.ccls.	USPAT	OR	ON	2006/06/07 17:08
S59 2	0	user\$4 with (history or activit\$4 or behavior\$4) near3 (web adj server\$1) near3 user\$1 same (identifier\$1 or id\$1)same database and 709/2\$\$.ccls.	USPAT	OR	ON	2006/06/07 17:09
S59 3	0	user\$4 with (history or activit\$4 or behavior\$4) near3 (web adj server\$1) same user\$1 same (identifier\$1 or id\$1)same database and 709/2\$\$.ccls.	USPAT	OR	ON	2006/06/07 17:09
S59 4	3115	user\$4 with (history or activit\$4 or behavior\$4) same (web adj server\$1) (identifier\$1 or id\$1) same database and 709/2\$\$.ccls.	USPAT	OR	ON	2006/06/07 17:09
S59 5	7	user\$4 with (history or activit\$4 or behavior\$4) same (web adj server\$1)same (identifier\$1 or id\$1) same database and 709/2\$\$.ccls.	USPAT	OR	ON	2007/04/14 14:50

**US-PAT-NO:** 

6609198

DOCUMENT-

US 6609198 B1

IDENTIFIER:

TITLE:

Log-on service providing credential level change without loss of

session continuity

### **Brief Summary Text - BSTX (5):**

The internet has become an important medium for information services and electronic commerce. As the internet has been commercialized, organizations initially established their presence in cyberspace by making information (typically static, non-sensitive promotional information) available on resources well removed from the operational infrastructure of the organization. Security issues were often addressed by isolating publicly accessible resources (e.g., <a href="web servers">web servers</a>) from more sensitive assets using firewall techniques. As long as the publicly accessible information and resources were relatively non-sensitive and user interactions with such information and resources was not mission critical, relatively simple firewall techniques were adequate. Though information and resources outside the firewall were at risk, the risk could generally be limited to non-proprietary information that was easily replaceable if compromised. Proprietary information and systems critical to day-to-day operations were sheltered behind the firewall and information flows across the firewall were filtered to exclude all but the comparatively non-threatening services such as electronic mail.

### **Brief Summary Text - BSTX (8):**

Another problem with individualized solutions is a veritable explosion in the number of access controls confronting a user. As more and more business is conducted using computer systems, users are confronted with multiple identifiers and passwords for various systems, resources or levels of access. Administrators are faced with the huge problem of issuing, tracking and revoking the identifiers associated with their users. As the "user" community grows to include vendors, customers, potential customers, consultants and others in addition to employees, a huge "id explosion" faces administrators. Furthermore, as individual users are themselves confronted with large numbers of identifiers and passwords, adherence to organizational security policies such as password restrictions, and requirements (e.g., length, character and/or case complexity, robustness to dictionary or easily-ascertainable information attack, frequency of update, etc.) may be reduced. As users acquire more passwords--some individuals may have 50 or more--they cannot help but write down or create easy-to-remember, and easy-to-compromise, passwords.

#### **Detailed Description Text - DETX (33):**

Generally, mapping rule logic is evaluated before a user is challenged to authenticate. Mapping occurs as a function of session environment and particulars of the information resource for which access is requested. By evaluating the minimum trust level required by the target of an access request, a service (e.g., a login service such as provided by login component 120) derives a list of potential authentication methods. The service then checks

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current session environment against the allowed environment states for each potential authentication method to trim the list further. If there is no particular resource for which access is being requested (e.g., if a user jumps straight to a sign-on page without requesting an access), the service will proceed according to the lowest level of trust available consistent with session environment. Other configurations may employ differing default **behaviors**.

#### **Detailed Description Text - DETX (65):**

In an exemplary embodiment, at least some of the above-described components are implemented as servlets executable in the context of a commercially-available <u>web server</u> environment. For example, the Java.TM. Embedded Server (JES) architecture with extensions for certificate handling, HyperText Transfer Protocol (HTTP), Simple Network Management Protocol (SNMP), Secure Sockets Layer (SSL), eXtensible Markup Language (XML) grammar processing and security Access Control List (ACL) support available from Sun Microsystems, Inc. is one suitable environment. Java and all Java-based marks and logos are trademarks or registered trademarks of Sun Microsystems, Inc. in the United States and other countries.

### **Detailed Description Text - DETX (66):**

In general, the description herein is focused on aspects of a security architecture, rather than on peculiarities of a particular implementation environment. It is envisioned that security architectures in accordance with the teachings of the present invention may be implemented in the context of many commercially-available networked information service environments, including **web server** environments, as well as in custom environments and environments that in the future will be developed. However, to facilitate an understanding of broad concepts using a specific exemplary environment, and without limitation, the description herein may include terminology specific to the Java Embedded Server (JES) architecture. Nonetheless, based on this description, persons of ordinary skill in the art will appreciate implementations suitable for other environments. The scope of the invention, as defined by the claims that follow, is not limited to any specific implementation environment.

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